

AMENDMENTS TO THE CLAIMS

Claims 1-4. (Canceled)

Claim 5. (Previously presented) A separating and supplying apparatus comprising:
a transfer conveyor for transferring arrayed articles to be separated and supplied;
a separating conveyor having one end portion for receiving the articles from said transfer conveyor as the articles are transferred by said transfer conveyor;
a first stopper for stopping transferring of the articles from said transfer conveyor to said separating conveyor after a predetermined number of the articles, after having been received by said separating conveyor, are positioned on a first portion of said separating conveyor; and
a second stopper including an endless belt and a first stopper member projecting from said endless belt, such that upon movement and then stoppage of said endless belt said first stopper member becomes positioned at a stop location for stopping a front one of the articles of the predetermined number on said separating conveyor and thereby preventing conveyance of the articles of the predetermined number by said separating conveyor.

Claim 6. (Previously presented) The apparatus according to claim 5, wherein said second stopper further includes a second stopper member projecting from said endless belt, such that upon additional movement and then stoppage of said endless belt

(i) said first stopper member is moved from its stop location and becomes positioned at another location, and

(ii) said second stopper member becomes positioned at a stop location for stopping on said separating conveyor a front one of articles of a predetermined number and thereby preventing conveyance of these articles by said separating conveyor.

Claim 7. (Previously presented) The apparatus according to claim 6, wherein said separating conveyor is pivotably supported at said one end portion.

Claim 8. (Previously presented) The apparatus according to claim 7, further comprising:
a counter for counting the articles that are received onto the first portion of said separating conveyor,

such that said first stopper is for stopping the transferring of the articles, from said transfer conveyor to said separating conveyor, when the articles counted by said counter becomes equal in number to the predetermined number.

Claim 9. (Previously presented) The apparatus according to claim 8, wherein said separating conveyor includes two parallel endless belt members defining a space therebetween, and said endless belt of said second stopper is positioned in said space between said two parallel endless belt members.

Claim 10. (Previously presented) The apparatus according to claim 6, further comprising:

a counter for counting the articles that are received onto the first portion of said separating conveyor,

such that said first stopper is for stopping the transferring of the articles, from said transfer conveyor to said separating conveyor, when the articles counted by said counter becomes equal in number to the predetermined number.

Claim 11. (Previously presented) The apparatus according to claim 6, wherein:
said separating conveyor includes two parallel endless belt members defining a space therebetween, and said endless belt of said second stopper is positioned in said space between said two parallel endless belt members.

Claim 12. (Previously presented) The apparatus according to claim 5, wherein said separating conveyor is pivotably supported at said one end portion.

Claim 13. (Previously presented) The apparatus according to claim 12, wherein said separating conveyor is pivotably supported at said one end portion about a vertical axis.

Claim 14. (Previously presented) The apparatus according to claim 5, further comprising:

a counter for counting the articles that are received onto the first portion of said separating conveyor,

such that said first stopper is for stopping the transferring of the articles, from said transfer conveyor to said separating conveyor, when the articles counted by said counter becomes equal in number to the predetermined number.

Claim 15. (Previously presented) The apparatus according to claim 5, wherein said separating conveyor includes two parallel endless belt members defining a space therebetween, and said endless belt of said second stopper is positioned in said space between said two parallel endless belt members.

Claim 16. (Previously presented) A method of separating and supplying articles, comprising:

using a transfer conveyor to transfer arrayed articles to be separated and supplied;
receiving on one end portion of a separating conveyor said articles as transferred by said transfer conveyor;

using a first stopper to stop transferring of said articles from said transfer conveyor to said separating conveyor after a predetermined number of said articles, after having been received by said separating conveyor, are positioned on a first portion of said separating conveyor; and

using a second stopper, including an endless belt and a first stopper member projecting from said endless belt, to stop a front one of said articles of the predetermined number on said separating conveyor, and thereby prevent conveyance of said articles of the predetermined number by said separating conveyor, by positioning said first stopper at a stop location.

Claim 17. (Previously presented) The method according to claim 16, wherein said second stopper further includes a second stopper member projecting from said endless belt, and further comprising:

after using said second stopper to stop said front one of said articles of the predetermined number on said separating conveyor, moving and then stopping said endless belt such that

(i) said first stopper member is moved from its stop location and becomes positioned at another location,

(ii) said articles of the predetermined number are conveyed by said separating conveyor to a separation location, and

(iii) said second stopper member becomes positioned at a stop location; and releasing said first stopper such that a predetermined number of said articles are conveyed until a front one of this predetermined number of articles is stopped by said second stopper member.

Claim 18. (Previously presented) The method according to claim 17, further comprising:

pivoting said separating conveyor about said one end portion such that the articles stopped by said second stopper member become oriented to be conveyed by said separating conveyor to another separation location upon movement of said endless belt.

Claim 19. (Previously presented) The method according to claim 18, further comprising:

using a counter to count said articles that are received onto said first portion of said separating conveyor,

such that using said first stopper to stop said transferring of said articles from said transfer conveyor to said separating conveyor comprises using said first stopper to stop said transferring of said articles from said transfer conveyor to said separating conveyor when the articles counted by said counter becomes equal in number to the predetermined number.

Claim 20. (Currently amended) The method according to claim 19, wherein said separating conveyor includes two parallel endless belt members defining a space ~~therebetween~~ therebetween, and said endless belt of said second stopper is positioned between said two parallel endless belt members.

Claim 21. (Previously presented) The method according to claim 17, further comprising:
using a counter to count said articles that are received onto said first portion of said separating conveyor,
such that using said first stopper to stop said transferring of said articles from said transfer conveyor to said separating conveyor comprises using said first stopper to stop said transferring of said articles from said transfer conveyor to said separating conveyor when the articles counted by said counter becomes equal in number to the predetermined number.

Claim 22. (Currently amended) The method according to claim 17, wherein said separating conveyor includes two parallel endless belt members defining a space ~~therebetween~~ therebetween, and said endless belt of said second stopper is positioned between said two parallel endless belt members.

Claim 23. (Previously presented) The method according to claim 16, further comprising:
pivoting said separating conveyor about said one end portion such that the articles stopped by said second stopper member become oriented to be conveyed by said separating conveyor to another separation location upon movement of said endless belt.

Claim 24. (Previously presented) The method according to claim 16, further comprising:

using a counter to count said articles that are received onto said first portion of said separating conveyor,

such that using said first stopper to stop said transferring of said articles from said transfer conveyor to said separating conveyor comprises using said first stopper to stop said transferring of said articles from said transfer conveyor to said separating conveyor when the articles counted by said counter becomes equal in number to the predetermined number.

Claim 25. (Currently amended) The method according to claim 16, wherein said separating conveyor includes two parallel endless belt members defining a space ~~therebetween~~ therebetween, and said endless belt of said second stopper is positioned between said two parallel endless belt members.